



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/799,306	10/799,306 03/12/2004		Roger W. Engelbart	7784-000624	8142	
27572	7590	10/18/2004		EXA	MINER	
HARNESS.	DICKE	Y & PIERCE, P.L.	C.	JARRET	JARRETT, RYAN A	
P.O. BOX 82	28	•				
BLOOMFIE	LD HILL	S, MI 48303		ART UNIT	PAPER NUMBER	
		,		2125		

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/799,306	ENGELBAR ET AL					
Office Action Summary	Examiner	Art Unit					
	Ryan A. Jarrett	2125					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, at If NO period for reply is specified above, the maximum statutory peri- Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma- earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of thi od will apply and will expire SIX (6) MO tute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 12	2 March 2004.						
<u> </u>	his action is non-final.						
• •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) <u>1-36</u> is/are pending in the application 4a) Of the above claim(s) is/are withd 5) Claim(s) is/are allowed. 6) Claim(s) <u>1-20 and 24-26</u> is/are rejected. 7) Claim(s) <u>21-23</u> is/are objected to. 8) Claim(s) are subject to restriction and	lrawn from consideration.						
Application Papers							
9) The specification is objected to by the Examiner.							
·	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
		• •					
Replacement drawing sheet(s) including the corr	· ·	• • • • • • • • • • • • • • • • • • • •					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a li	ents have been received. ents have been received in A riority documents have beer eau (PCT Rule 17.2(a)).	Application No n received in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892)		Summary (PTO-413)					
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 3/12/,4/2,6/7/04. 		(s)/Mail Date Informal Patent Application (PTO-152)					

Application/Control Number: 10/799,306

Art Unit: 2125

DETAILED ACTION

Claim Objections

1. Claims 7, 13, and 21 are objected to because of the following informalities: Appropriate correction is required.

In claim 7 line 5, "the" should be replaced with "a".

In claim 13 line 4, "the" should be replaced with "a".

In claim 21 line 3, "the" should be replaced with "a".

In claim 26 line 2, the first instance of "the" should be replaced with "a".

In claim 33 line 2, the first instance of "the" should be replaced with "a".

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 25-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a program not tangibly embodied on or in some form of computer readable medium.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number: 10/799,306

Art Unit: 2125

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-14, 16-20, 24-26, and 28-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. U.S. Patent No. 6,205,239. For example, Lin et al. discloses a method enabling automated repair of defects with a material placement machine, the method comprising: inspecting a composite structure for defects; determining whether a defect detected by the inspecting is unacceptable; determining whether a defect detected by the inspecting is repairable by the material placement machine without user intervention; and automatically causing the material placement machine to return to and place material sufficient for repairing a defect determined to be unacceptable and repairable by the material placement machine without user intervention; automatically causing the material placement machine to return to each defect determined to be unacceptable (e.g., col. 2 lines 30-39, col. 7 lines 10-27, col. 22 line 65 col. 24 line 67);

wherein the automatically causing includes electronically accessing positional data defining a location of a defect (e.g., col. 5 lines 30-32, col. 8 lines 32-54, col. 10 lines 50-63);

wherein the automatically causing includes creating a program to automatically generate instructions for causing the material placement machine to return to and place material sufficient for repairing defects determined to be unacceptable and repairable by

Application/Control Number: 10/799,306

Art Unit: 2125

the material placement machine without user intervention (e.g., col. 22 line 65 – col. 24 line 67);

wherein the method includes communicating with an inspection system performing the inspecting (e.g., col. 22 line 65 – col. 24 line 67);

exterior monitoring of the material application position of the material placement machine to determine a location of a defect detected by the inspecting (e.g., col. 5 lines 30-32, col. 8 lines 32-54, col. 10 lines 50-63, col. 22 line 65 – col. 24 line 67);

wherein the program extracts the positional data from a first file to a second file and generates the instructions within the second file (e.g., col. 17 lines 1-15, col. 23 line 43 – col. 24 line 22).

6. Claims 13-15, 25, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Holmes et al. U.S. Patent No. 6,799,619. Holmes et al. Discloses a method comprising: electronically accessing positional data defining a defect location on a composite structure; and automatically causing a material placement machine to return to the defect location as defined by the positional data; wherein the automatically causing includes automatically causing the material placement machine to place material sufficient for repairing a defect at the defect location; wherein the automatically causing includes automatically causing the material placement machine, after completing a ply of the composite structure, to return to a course of the ply in which a defect is located and place material along the course sufficient for repairing the defect (e.g., col. 6 line 4 – col. 7 line 23, col. 8 lines 23-36).

Allowable Subject Matter

7. Claims 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or fairly suggest exterior monitoring of a material application position of a material placement machine to determine a first distance from a first reference point of a composite structure to a defect; wherein the monitoring includes detecting and counting transitions between contrasting portions of a code ring coupled for common rotation with a compaction roller, in combination with the remaining features and elements of the claimed invention.

The prior art of record fails to teach or fairly suggest exterior monitoring of a material application position of a material placement machine to determine a first distance from a first reference point of a composite structure to a defect; further comprising summing courses completed to produce a total completed course count; and multiplying a predetermined course width by the total completed course count to determine a second distance from a second reference point of the composite structure to the defect, in combination with the remaining features and elements of the claimed invention.

Art Unit: 2125

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (703) 308-4739. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LP.P.

10/8/04

Ryan A. Jarrett Examiner Art Unit 2125

LEO PICARD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100